

ABSTRACT

This assembly is for use with hot chamber die casting. More specifically, the assembly is a fast fill bottom fill gooseneck. The intake port has been moved to the bottom of the gooseneck. The bottom intake port 5 has been fitted with an interior plug. When the plunger moves upwardly, it creates a vacuum the pulls the interior plug upwardly. This vacuum also opens the bottom intake port pulling molten metal into the chamber from the reservoir. When the plunger moves downwardly, the interior plug moves 10 downwardly and seals the bottom intake port. As the plunger continues to travel downward, it pressurizes the molten metal and forces the molten metal contained in the cylinder through the channel in the gooseneck, through the nozzle seat and the nozzle into the die cavity of the die thereby filling the cavity and forming the cast part.